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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,981	10/14/2003	Hiroyasu Inoue	890050.443	4729

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EXAMINER
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ANGEBRANNDT, MARTIN J

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/684,981	<b>Applicant(s)</b> INOUE ET AL.	
	<b>Examiner</b> Martin J. Angebranndt	<b>Art Unit</b> 1756	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 1/20/04 & 10/14/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/20/04</u> . | 6) <input type="checkbox"/> Other: _____  |

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1. The Applicant is advised that should claim 3 be found allowable, claim 4 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

These are duplicates see 37 CFR 1.75(b).

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,3,4,19 and 20 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Uno et al. '304.

See the recording medium made in sections, [0149-0156]. When the Ge-O-N is formed, Ge is the target materials and oxygen and nitrogen are present as sputtering gasses or

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alternatively GeO may be the target materials and nitrogen present as a sputtering gas. [0157-0158].

The examiner holds that while the media are not optimized for 380-450 nm, the media are sensitive in that region due to the composition of the recording layers.

5. Claims 1,3,4,19 and 20 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Oyamatsu et al. '998.

See recording medium of example 1, where Ta<sub>2</sub>O<sub>5</sub> sputtered in a mixture of Ar and N<sub>2</sub> to form the dielectric layer between the magneto-optical recording layer and the reflective layer. (6/20-7/17). See also the other examples.

The examiner holds that while the media are not optimized for 380-450 nm, the media are sensitive in that region due to the composition of the recording layers.

6. Claims 1-4,19 and 20 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Sakaue et al. '587.

See recording medium of working example 1, where Ta<sub>2</sub>O<sub>5</sub> sputtered in a mixture of Ar and N<sub>2</sub> to form the barrier layer [0061] between the recording layer and the reflective layer. [0054-0062]. The use of other materials including GeON, SiON or AlON in place of the TaON is disclosed. [0068]. See also example 3, and the examples described in table 3 [0079-0089]. The use of TaON yields a better signal amplitude, reduced corrosion and improved thermal conductivity (heat dissipation). [0072-0073].

The examiner holds that while the media are not optimized for 380-450 nm, the media are sensitive in that region due to the composition of the recording layers.

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7. Claims 1,3,4,19 and 20 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Sekiya et al. JP 03-005929.

See recording medium of examples 1-6 in table 1 on page 6 and examples 14-19 in table 2 on page 8, where Ta<sub>2</sub>O<sub>5</sub> sputtered in a mixture of Ar and N<sub>2</sub> to form the dielectric layer between the magneto-optical recording layer and the reflective layer. (page 5/upper right column to lower left column showing Ar/N<sub>2</sub> ratio).

The examiner holds that while the media are not optimized for 380-450 nm, the media are sensitive in that region due to the composition of the recording layers.

The examiner holds that while the media are not optimized for 380-450 nm, the media are sensitive in that region due to the composition of the recording layers.

8. Claims 1,3,4,19 and 20 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Strandjord et al. '813.

See examples 22-37, 76-78, 84,96-98, 103,104,112-124 in the table in columns 10-18, where these are overcoats over the SnBiCu recording layer.

The examiner holds that while the media are not optimized for 380-450 nm, the media are sensitive in that region due to the composition of the recording layers.

9. Claims 1,3,4,19 and 20 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Uno et al. '239.

The example describes a polycarbonate substrate, a silica,-ZnS lower dielectric layer, GeCrON interface layer, a GeTeSb recording layer, a GeCrON interface layer, an AlON layer and a Au reflective layer. The sputtering process is also described. (14/ 62-15/65). The use of multilayered optical recording media is disclosed with respect to figures 7 and 8 and the text in

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column 17, but use a GeCrN interfacial layers. The use of Ti-O-N, Ta-O-N, Ge-O-N, Cr-O-N, Si-O-N, Al-O-N, Nb-N-O, Mo-O-N, Zr-O-N for interface layers 4 and 6 (8/21-46).

The examiner notes that the GeTeSb layer is used with a 405 nm laser.

10. Claims 1-4, 15, 16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uno et al. '239.

It would have been obvious to one skilled in the art to modify the first examples by adding another recording layer as shown in figures 7 and 8 to increase the information capacity of the recording medium and/or it would have been obvious to use other oxynitrides disclosed such as Ti-O-N, Ta-O-N, in place of the GeCrON interface layer used in the example with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of equivalence.

11. Claims 1-4, 15, 16 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uno et al. WO 02/2978 and Sakaue et al. '587.

Uno et al. WO 02/29787 teaches the use of Ti-O-N, Ta-O-N, Ge-O-N, Cr-O-N, Si-O-N, Al-O-N, Nb-N-O, Mo-O-N, Zr-O-N for the protective layers 3 and 7 ((14/1-10) and [0047] in the corresponding Uno et al. '069). The use of Ti-O-N, Ta-O-N, Ge-O-N, Cr-O-N, Si-O-N, Al-O-N, Nb-N-O, Mo-O-N, Zr-O-N for interface layers 4 and 6 ((14/19-15/4) and [0049] in the corresponding Uno et al. '069). Figure 3, shows an optical recording medium with two recording layers (103, 203)

It would have been obvious to one skilled in the art to modify the example of Sakaue et al. '587 by adding another recording layer as shown in figures 7 and 8 of Uno et al. WO 02/2978 to increase the information capacity of the recording medium and/or it would have been obvious

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to use other oxynitrides disclosed such as Ti-O-N, Ta-O-N, in place of the GeCrON interface layer in a medium corresponding to figure 3 of Uno et al. WO 02/2978 based upon the direction within Uno et al. WO 02/2978 and with a reasonable expectation of improving the performance characteristics based upon the disclosure of Sakaue et al. '587.

12. Claims 1-14 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shuy et al. '160, in view of Sakaue et al. '587.

Shuy et al. '160 teach in embodiment 4, a medium comprising a polycarbonate substrate, a ZnS-SiO<sub>2</sub> layer, a transparent Si first recording layer, a reflective Si-Au second recording layer and a ZnS-SiO<sub>2</sub> layer. The ZnS-SiO<sub>2</sub> layers are thermal manipulation layers [0030]. The reflective recording layer may be Ag, Al, Au, Pt, U, IN, Sn, W, Ir, Re, Rh or Ta [0027]. The transparent recording layer may be Si, Ge, GaP, GaAs, InAs, ...[0026].

It would have been obvious to modify the cited examples of Shuy et al. '160 by using Ta-O-N as thermal manipulation layers in place of the ZnS-SiO<sub>2</sub> layers with a reasonable expectation of improving the performance characteristics based upon the disclosure of Sakaue et al. '587.

The examiner notes that these claims do not recite a reflective layer as shown in the figures of the instant application.

13. Claims 1-14 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoshima et al. '551, in view of Sakaue et al. '587 or Uno et al. '239.

Aoshima et al. '551 teach in example 1, a medium comprising a polycarbonate substrate, a ZnS-SiO<sub>2</sub> layer, a transparent Si first recording layer, a reflective Cu second recording layer and a ZnS-SiO<sub>2</sub> layer. [0121-0126] Example 11 is similar and includes a reflective layer adjacent

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to the substrate and is recorded upon using a 405 nm laser as well. [0186-0189]. Useful dielectric layer materials including oxide and nitrides are disclosed [0060]. The transparent recording layer may be Si, Ge, Sn, Mg, In, Zn, Bi, Al [0068].

It would have been obvious to modify the cited examples of Aoshima et al. '551 by using Ta-O-N or Ti-O-N as dielectric layers in place of the ZnS-SiO<sub>2</sub> layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239

14. Claims 1-14 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishima et al. '452, in view of Sakaue et al. '587 or Uno et al. '239.

Mishima et al. '452 teach in example 1, a medium comprising a polycarbonate substrate, a ZnS-SiO<sub>2</sub> layer, a transparent Si first recording layer, a reflective Cu second recording layer and a ZnS-SiO<sub>2</sub> layer. [0121-0124] Example 16 is similar and includes a reflective layer adjacent to the substrate and is recorded upon using a 405 nm laser as well. [0162-0165]. Useful dielectric layer materials including oxide and nitrides are disclosed [0078]. The transparent recording layer may be Si, Ge, C, Sn, Zn, Cu [0116].

It would have been obvious to modify the cited examples of Mishima et al. '452 by using Ta-O-N or Ti-O-N as dielectric layers in place of the ZnS-SiO<sub>2</sub> layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239

15. Claims 1-10,13-14 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoshima et al. '351, in view of Sakaue et al. '587 or Uno et al. '239.



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Aoshima et al. '351 teach in example 1, a medium comprising a polycarbonate substrate, a ZnS-SiO<sub>2</sub> layer, a transparent Si first recording layer, a reflective Ag second recording layer and a ZnS-SiO<sub>2</sub> layer. [0116-0119] Example 15 is similar and includes a reflective layer adjacent to the substrate and is recorded upon using a 405 nm laser as well. [0165-0168]. Useful dielectric layer materials including oxide and nitrides are disclosed [0072]. The transparent recording layer may be Si, Ge, Sn [0111].

It would have been obvious to modify the cited examples of Aoshima et al. '351 by using Ta-O-N or Ti-O-N as dielectric layers in place of the ZnS-SiO<sub>2</sub> layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239

16. Claims 1-10,13,14 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishima et al. '577, in view of Sakaue et al. '587 or Uno et al. '239.

Mishima et al. '577 teach in example 1, a medium comprising a polycarbonate substrate, a reflective layer a ZnS-SiO<sub>2</sub> layer, a transparent Si first recording layer, a reflective Zn second recording layer and a ZnS-SiO<sub>2</sub> layer. [0121-0126] This is recorded upon using a 405 nm laser. Useful dielectric layer materials including oxide and nitrides are disclosed [0079]. The transparent recording layer may be Si, Ge, C, Al [0084].

It would have been obvious to modify the cited examples of Mishima et al. '577 by using Ta-O-N or Ti-O-N as dielectric layers in place of the ZnS-SiO<sub>2</sub> layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239

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17. Claims 1-10,13,14 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoshima et al. '973, in view of Sakaue et al. '587 or Uno et al. '239.

Aoshima et al. '973 teach in example 1, a medium comprising a polycarbonate substrate, a reflective layer, a ZnS-SiO<sub>2</sub> layer, a transparent Si first recording layer, a reflective Zn second recording layer and a ZnS-SiO<sub>2</sub> layer. [0121-0126]. This is recorded upon using a 405 nm laser. Useful dielectric layer materials including oxide and nitrides are disclosed [0050]. The transparent recording layer may be Si, Ge, C, Sn [0055].

It would have been obvious to modify the cited examples of Aoshima et al. '973 by using Ta-O-N or Ti-O-N as dielectric layers in place of the ZnS-SiO<sub>2</sub> layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239

18. Claims 1-14 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishima et al. '080, in view of Sakaue et al. '587 or Uno et al. '239.

Mishima et al. '080 teach in example 1, a medium comprising a polycarbonate substrate, a reflective layer, a ZnS-SiO<sub>2</sub> layer, a transparent Si first recording layer, a reflective Cu second recording layer and a ZnS-SiO<sub>2</sub> layer. [0134-21-0153]. This is recorded upon using a 405 nm laser as well. [0162-0165]. Useful dielectric layer materials including oxide and nitrides are disclosed [0043]. The transparent recording layer may be Si, Ge, C, Sn, Zn, Cu [0014].

It would have been obvious to modify the cited examples of Mishima et al. '452 by using Ta-O-N or Ti-O-N as dielectric layers in place of the ZnS-SiO<sub>2</sub> layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239

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19. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. '194, in view of Sakaue et al. '587 or Uno et al. '239.

Inoue et al. '194 teach in example 1, a medium comprising a polycarbonate substrate, a reflective layer, a ZnS-SiO<sub>2</sub> layer, a transparent Si first recording layer, a reflective Cu second recording layer and a ZnS-SiO<sub>2</sub> layer and a second recording layer composite. [0128-0151]. This is recorded upon using a 405 nm laser as well. Useful dielectric layer materials including oxide and nitrides are disclosed [0096].

It would have been obvious to modify the cited examples of Inoue et al. '194 by using Ta-O-N or Ti-O-N as intermediate/dielectric layers in place of the ZnS-SiO<sub>2</sub> layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239

20. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. '932, in view of Sakaue et al. '587 or Uno et al. '239.

Inoue et al. '932 teach in example 1, a medium comprising a polycarbonate substrate, a reflective layer, a ZnS-SiO<sub>2</sub> layer, a transparent Si first recording layer, a reflective Cu second recording layer and a ZnS-SiO<sub>2</sub> layer. The use of multiple recording layers is described [0183-0186]. This is recorded upon using a 405 nm laser as well. Useful dielectric layer materials including oxide and nitrides are disclosed [0082].

It would have been obvious to modify the cited examples of Inoue et al. '194 by using Ta-O-N or Ti-O-N as intermediate/dielectric layers in place of the ZnS-SiO<sub>2</sub> layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239

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21. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

22. Claims 1-14 and 19-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-43 of copending Application No. 10/406109 (US 2003/0190551) in view of Sakaue et al. ‘587 or Uno et al. ‘239.

It would have been obvious to modify the claimed optical recording media of 10/406109 by using Ta-O-N as the dielectric layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. ‘587 or Uno et al. ‘239.

This is a provisional obviousness-type double patenting rejection.

23. Claims 1-14 and 19-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-36 of copending Application No. 10/423686 (US 2003/0202452) in view of Sakaue et al. ‘587 or Uno et al. ‘239

It would have been obvious to modify the claimed optical recording media of 10/423686 by using Ta-O-N as the dielectric layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239.

This is a provisional obviousness-type double patenting rejection.

24. Claims 1-10,13,14 and 19-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-36 of copending Application No. 10/444172 (US 2003/0223351) in view of Sakaue et al. '587 or Uno et al. '239

It would have been obvious to modify the claimed optical recording media of 10/444172 by using Ta-O-N as the dielectric layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239.

This is a provisional obviousness-type double patenting rejection.

25. Claims 1-10,13,14 and 19-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-40 of copending Application No. 10/425571 (US 2003/0231577) in view of Sakaue et al. '587 or Uno et al. '239

It would have been obvious to modify the claimed optical recording media of 10/425571 by using Ta-O-N as the dielectric layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239.

This is a provisional obviousness-type double patenting rejection.

26. Claims 1-10,13,14 and 19-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/637407 (US 2004/0027973) in view of Sakaue et al. '587 or Uno et al. '239

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It would have been obvious to modify the claimed optical recording media of 10/637407 by using Ta-O-N as the dielectric layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239.

This is a provisional obviousness-type double patenting rejection.

27. Claims 1-14 and 19-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/608814 (US 2004/0038080) in view of Sakaue et al. '587 or Uno et al. '239.

It would have been obvious to modify the claimed optical recording media of 10/608814 by using Ta-O-N as the dielectric layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239.

This is a provisional obviousness-type double patenting rejection.

28. Claims 1-14 and 19-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/608814 (US 2004/0038080) in view of Sakaue et al. '587 or Uno et al. '239.

It would have been obvious to modify the claimed optical recording media of 10/608814 by using Ta-O-N as the dielectric layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239.

This is a provisional obviousness-type double patenting rejection.

29. Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-31 of copending Application No. 10/748979 (US 2004/0152016) in view of Sakaue et al. '587 or Uno et al. '239.

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It would have been obvious to modify the claimed optical recording media of 10/748979 by using Ta-O-N as the intermediate layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239.

This is a provisional obviousness-type double patenting rejection.

30. Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-24 of copending Application No. 10/717831 (US 2004/0110086) .

It would have been obvious to use the dielectric layers described in claims 1 and 2 in the claimed optical recording media of 10/717831 including those using the Cu layer (cl 4).

This is a provisional obviousness-type double patenting rejection.

31. Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of copending Application No. 10/818324 (US 2004/0202097) in view of Sakaue et al. '587 or Uno et al. '239.

It would have been obvious to modify the claimed optical recording media of 10/818324 by using Ta-O-N as the intermediate layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239.

This is a provisional obviousness-type double patenting rejection.

32. Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-24 of copending Application No. 10/808628 (US 2004/0191685) in view of Sakaue et al. '587 or Uno et al. '239.

It would have been obvious to modify the claimed optical recording media of 10/808628 by using Ta-O-N as the dielectric layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239.

This is a provisional obviousness-type double patenting rejection.

33. Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of copending Application No. 10/764805 (US 2004/0157158) in view of Sakaue et al. '587 or Uno et al. '239.

It would have been obvious to modify the claimed optical recording media of 10/764805 by using Ta-O-N as the dielectric layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239.

This is a provisional obviousness-type double patenting rejection.

34. Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-26 of copending Application No. 10/613525 (US 2004/0052194) in view of Sakaue et al. '587 or Uno et al. '239.

It would have been obvious to modify the claimed optical recording media of 10/613525 by using Ta-O-N as the light transmission layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239.

This is a provisional obviousness-type double patenting rejection.

35. Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-26 of copending Application No. 10/612615 (US 2004/0004932) in view of Sakaue et al. '587 or Uno et al. '239.



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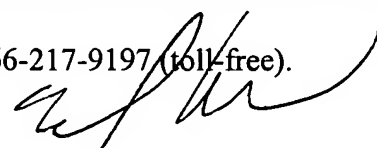
It would have been obvious to modify the claimed optical recording media of 10/612615 by using Ta-O-N as the light transmission layers with a reasonable expectation of forming a useful optical recording medium based upon the disclosure of Sakaue et al. '587 or Uno et al. '239.

This is a provisional obviousness-type double patenting rejection.

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin J. Angebranndt whose telephone number is 571-272-1378. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Martin J. Angebranndt  
Primary Examiner  
Art Unit 1756

06/15/2006